AdriÃ;n Bonilla-Petriciolet

List of Publications by Year in descending order

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Version: 2024-02-01



#	Article	IF	CITATIONS
1	Preparation and evaluation of a coated smectite clay-based material modified with epichlorohydrin-dimethylamine for the diclofenac removal. Environmental Science and Pollution Research, 2023, 30, 124596-124609.	2.7	5
2	Performance and interactions of diclofenac adsorption using Alginate/Carbon-based Films: Experimental investigation and statistical physics modelling. Chemical Engineering Journal, 2022, 428, 131929.	6.6	57
3	Adsorption of methylene blue from aqueous solution on activated carbons and composite prepared from an agricultural waste biomass: A comparative study by experimental and advanced modeling analysis. Chemical Engineering Journal, 2022, 430, 132801.	6.6	181
4	Cyclohexane and benzene separation by fixed-bed adsorption on activated carbons prepared from coconut shell. Environmental Technology and Innovation, 2022, 25, 102076.	3.0	23
5	Functionalization and activation of carbon-based catalysts with KOH and calcium and their application in transesterification to produce biodiesel: Optimization of catalytic properties and kinetic study. Fuel, 2022, 310, 122066.	3.4	5
6	A study of single and quaternary adsorption of Cu2+, Co2+, Ni2+ and Ag+ on sludge modified by alkaline fusion. Chemical Engineering Journal, 2022, 433, 133674.	6.6	7
7	Engineered biochar: A way forward to environmental remediation. Fuel, 2022, 311, 122510.	3.4	38
8	Functionalized hydrochar-based catalysts for biodiesel production via oil transesterification: Optimum preparation conditions and performance assessment. Fuel, 2022, 312, 122731.	3.4	10
9	Fast and effective catalytic degradation of an organic dye by eco-friendly capped ZnS and Mn-doped ZnS nanocrystals. Environmental Science and Pollution Research, 2022, 29, 33474-33494.	2.7	7
10	Molecular picture of the adsorption of phenol, toluene, carbon dioxide and water on kaolinite basal surfaces. Applied Surface Science, 2022, 585, 152699.	3.1	13
11	A Review of the Modeling of Adsorption of Organic and Inorganic Pollutants from Water Using Artificial Neural Networks. Adsorption Science and Technology, 2022, 2022, .	1.5	11
12	Physicochemical Modeling of the Adsorption of Pharmaceuticals on MIL-100-Fe and MIL-101-Fe MOFs. Adsorption Science and Technology, 2022, 2022, .	1.5	8
13	Sustainable Downstream Separation of Itaconic Acid Using Carbon-Based Adsorbents. Adsorption Science and Technology, 2022, 2022, .	1.5	1
14	Understanding the Cu2+ adsorption mechanism on activated carbon using advanced statistical physics modelling. Environmental Science and Pollution Research, 2022, , 1.	2.7	1
15	Thermodynamics and Mechanism of the Adsorption of Heavy Metal Ions on Keratin Biomasses for Wastewater Detoxification. Adsorption Science and Technology, 2022, 2022, .	1.5	13
16	New insights into the selective adsorption mechanism of cationic and anionic dyes using MIL-101(Fe) metal-organic framework: Modeling and interpretation of physicochemical parameters. Journal of Contaminant Hydrology, 2022, 247, 103977.	1.6	18
17	Outstanding Performance of a New Exfoliated Clay Impregnated with Rutile TiO2 Nanoparticles Composite for Dyes Adsorption: Experimental and Theoretical Studies. Coatings, 2022, 12, 22.	1.2	5
18	Using an enhanced multilayer model to analyze the performance of nickel alginate/graphene oxide aerogel, nickel alginate aerogel/activated carbon, and activated carbon in the adsorption of a textile dye pollutant. Environmental Science and Pollution Research, 2022, 29, 63622-63628.	2.7	9

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19	ADSORPTION OF DENTAL CLINIC POLLUTANTS USING BONE CHAR: ADSORBENT PREPARATION, ASSESSMENT AND MECHANISM ANALYSIS. Chemical Engineering Research and Design, 2022, , .	2.7	7
20	Enhanced adsorption of ketoprofen and 2,4-dichlorophenoxyactic acid on Physalis peruviana fruit residue functionalized with H2SO4: Adsorption properties and statistical physics modeling. Chemical Engineering Journal, 2022, 445, 136773.	6.6	22
21	Synthesis and Characterization of New Catalysts Grains Based on Iron(Oxy)Hydroxides supported on Zirconium for the Degradation of 4-Nitrophenol in Aqueous Solution. Adsorption Science and Technology, 2022, 2022, .	1.5	0
22	Synthesis and preparation of acid capped CdSe nanocrystals as successful adsorbent and photocatalyst for the removal of dyes from water and its statistical physics analysis. Environmental Science and Pollution Research, 2022, 29, 72747-72763.	2.7	5
23	An overview on the calculation of thermodynamic properties and phase equilibria in biofuels production and biorefinery. , 2022, , 53-73.		0
24	A novel CO2 activation at room temperature to prepare an engineered lanthanum-based adsorbent for a sustainable arsenic removal from water. Chemical Engineering Research and Design, 2022, 185, 239-252.	2.7	6
25	Recent advances in aqueous virus removal technologies. Chemosphere, 2022, 305, 135441.	4.2	36
26	Assessment of the simultaneous regression of liquid-liquid and vapor-liquid equilibria data of binary systems using NRTL and artificial neural networks. Fluid Phase Equilibria, 2022, 561, 113537.	1.4	6
27	Residual Mexican biomasses for bioenergy and fine chemical production: correlation between composition and specific applications. Biomass Conversion and Biorefinery, 2021, 11, 619-631.	2.9	21
28	Simultaneous adsorption of acetaminophen, diclofenac and tetracycline by organo-sepiolite: Experiments and statistical physics modelling. Chemical Engineering Journal, 2021, 404, 126601.	6.6	48
29	Physicochemical analysis of multilayer adsorption mechanism of anionic dyes on lignocellulosic biomasses via statistical physics and density functional theory. Journal of Molecular Liquids, 2021, 322, 114511.	2.3	29
30	Recycling of Tetra pak wastes via pyrolysis: Characterization of solid products and application of the resulting char in the adsorption of mercury from water. Journal of Cleaner Production, 2021, 291, 125219.	4.6	21
31	Trapping of Ag+, Cu2+, and Co2+ by faujasite zeolite Y: New interpretations of the adsorption mechanism via DFT and statistical modeling investigation. Chemical Engineering Journal, 2021, 420, 127712.	6.6	32
32	Application of a heterogeneous physical model for the adsorption of Cd2+, Ni2+, Zn2+ and Cu2+ ions on flamboyant pods functionalized with citric acid. Chemical Engineering Journal, 2021, 417, 127975.	6.6	47
33	Effective adsorption of dyes on an activated carbon prepared from carboxymethyl cellulose: Experiments, characterization and advanced modelling. Chemical Engineering Journal, 2021, 417, 128116.	6.6	175
34	Energy-Saving and Sustainable Separation of Bioalcohols by Adsorption on Bone Char. Adsorption Science and Technology, 2021, 2021, 1-16.	1.5	7
35	Adsorption mechanism of Zn2+, Ni2+, Cd2+, and Cu2+ ions by carbon-based adsorbents: interpretation of the adsorption isotherms via physical modelling. Environmental Science and Pollution Research, 2021, 28, 30943-30954.	2.7	66
36	Theoretical assessment of the adsorption mechanism of ibuprofen, ampicillin, orange G and malachite green on a biomass functionalized with plasma. Journal of Environmental Chemical Engineering, 2021, 9, 104950.	3.3	23

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37	Impact of the stacking fault and surface defects states of colloidal CdSe nanocrystals on the removal of reactive black 5. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2021, 265, 115029.	1.7	12
38	Theoretical study and analysis of o-nitrophenol adsorption using layered double hydroxides containing Ca-Al, Ni-Al and Zn-Al. Environmental Science and Pollution Research, 2021, 28, 44547-44556.	2.7	7
39	Novel biochar and hydrochar for the adsorption of 2-nitrophenol from aqueous solutions: An approach using the PVSDM model. Chemosphere, 2021, 269, 128748.	4.2	26
40	Three-dimensional mass transport modeling of pharmaceuticals adsorption inside ZnAl/biochar composite. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2021, 614, 126170.	2.3	29
41	Nut Shells as Adsorbents of Pollutants: Research and Perspectives. Frontiers in Chemical Engineering, 2021, 3, .	1.3	8
42	Make it clean, make it safe: A review on virus elimination via adsorption. Chemical Engineering Journal, 2021, 412, 128682.	6.6	40
43	Adsorption of ibuprofen on cocoa shell biomass-based adsorbents: Interpretation of the adsorption equilibrium via statistical physics theory. Journal of Molecular Liquids, 2021, 331, 115697.	2.3	33
44	Efficient and sustainable recovery of lipids from sewage sludge using ethyl esters of volatile fatty acids as sustainable extracting solvent. Fuel, 2021, 295, 120630.	3.4	12
45	Physicochemical assessment of anionic dye adsorption on bone char using a multilayer statistical physics model. Environmental Science and Pollution Research, 2021, 28, 67248-67255.	2.7	20
46	Adsorption of 3-aminophenol and resorcinol on avocado seed activated carbon: Mathematical modelling, thermodynamic study and description of adsorbent performance. Journal of Molecular Liquids, 2021, 342, 116952.	2.3	21
47	Emerging technologies for biofuel production: A critical review on recent progress, challenges and perspectives. Journal of Environmental Management, 2021, 290, 112627.	3.8	122
48	Kinetics, process design and implementation of zwitterionic adsorbent coating for dipolar dyes removal in wastewater treatment industry. Environmental Technology and Innovation, 2021, 23, 101763.	3.0	9
49	Cr(VI) adsorption onto a new composite prepared from Meidum black clay and pomegranate peel extract: Experiments and physicochemical interpretations. Journal of Environmental Chemical Engineering, 2021, 9, 105352.	3.3	26
50	Modeling of binary and ternary batch adsorption systems via multidimensional logistic distribution and statistical physics. Journal of Environmental Chemical Engineering, 2021, 9, 105664.	3.3	2
51	Implementation of a multilayer statistical physics model to interpret the adsorption of food dyes on a chitosan film. Journal of Environmental Chemical Engineering, 2021, 9, 105516.	3.3	34
52	Preparation of an avocado seed hydrochar and its application as heavy metal adsorbent: Properties and advanced statistical physics modeling. Chemical Engineering Journal, 2021, 419, 129472.	6.6	44
53	Influence of plasma-based surface functionalization of palm fibers on the adsorption of diclofenac from water: Experiments, thermodynamics and removal mechanism. Journal of Water Process Engineering, 2021, 43, 102254.	2.6	18
54	Optimization of flamboyant-based catalysts functionalized with calcium for fatty acid methyl esters production via transesterification. Fuel, 2021, 302, 121125.	3.4	4

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55	High impact of thiol capped ZnS nanocrystals on the degradation of single and binary aqueous solutions of industrial azo dyes under sunlight. Journal of Environmental Chemical Engineering, 2021, 9, 105915.	3.3	16
56	A reconsideration on the resolution of phase stability analysis using stochastic global optimization methods: Proposal of a reliable set of benchmark problems. Fluid Phase Equilibria, 2021, 548, 113180.	1.4	2
57	Adsorptive recovery of butanol, propanol, and ethanol using activated carbon based on residual sludge industrial (ACRS). Journal of Molecular Liquids, 2021, 341, 117452.	2.3	5
58	Selective adsorption of glucose towards itaconic acid on amorphous silica surfaces: Insights from density functional theory calculations. Journal of Molecular Liquids, 2021, 343, 117586.	2.3	5
59	Utilizing modified weathered basalt as a novel approach in the preparation of Fe3O4 nanoparticles: Experimental and theoretical studies for crystal violet adsorption. Journal of Environmental Chemical Engineering, 2021, 9, 106220.	3.3	28
60	A statistical physics analysis of the adsorption of Fe3+, Al3+ and Cu2+ heavy metals on chitosan films via homogeneous and heterogeneous monolayer models. Journal of Molecular Liquids, 2021, 343, 117617.	2.3	12
61	One-step fabrication of a new outstanding rutile TiO2 nanoparticles/anthracite adsorbent: Modeling and physicochemical interpretations for malachite green removal. Chemical Engineering Journal, 2021, 426, 131890.	6.6	19
62	Engineered Magnetic Carbon-Based Adsorbents for the Removal of Water Priority Pollutants: An Overview. Adsorption Science and Technology, 2021, 2021, 1-41.	1.5	10
63	Insights Into the Mn(VII) and Cr(VI) Adsorption Mechanisms on Purified Diatomite/MCM-41 Composite: Experimental Study and Statistical Physics Analysis. Frontiers in Chemistry, 2021, 9, 814431.	1.8	5
64	Dynamic optimization for the enzymatic production of acylglycerols. Chemical Engineering Communications, 2020, 207, 93-108.	1.5	3
65	Lanthanum- and cerium-based functionalization of chars and activated carbons for the adsorption of fluoride and arsenic ions. International Journal of Environmental Science and Technology, 2020, 17, 115-128.	1.8	26
66	Adsorption of dyes brilliant blue, sunset yellow and tartrazine from aqueous solution on chitosan: Analytical interpretation via multilayer statistical physics model. Chemical Engineering Journal, 2020, 382, 122952.	6.6	123
67	H2O2-activated anthracite impregnated with chitosan as a novel composite for Cr(VI) and methyl orange adsorption in single-compound and binary systems: Modeling and mechanism interpretation. Chemical Engineering Journal, 2020, 380, 122445.	6.6	87
68	Adsorption of amoxicillin and tetracycline on activated carbon prepared from durian shell in single and binary systems: Experimental study and modeling analysis. Chemical Engineering Journal, 2020, 379, 122320.	6.6	101
69	Statistical physics modeling and interpretation of the adsorption of dye remazol black B on natural and carbonized biomasses. Journal of Molecular Liquids, 2020, 299, 112099.	2.3	27
70	Adsorption of acid green and procion red on a magnetic geopolymer based adsorbent: Experiments, characterization and theoretical treatment. Chemical Engineering Journal, 2020, 383, 123113.	6.6	61
71	Preparation and characterization of a novel mountain soursop seeds powder adsorbent and its application for the removal of crystal violet and methylene blue from aqueous solutions. Chemical Engineering Journal, 2020, 391, 123617.	6.6	70
72	Physicochemical interpretation of the adsorption of 4-Bromophenol and 4-Chloroaniline on an activated carbon. Journal of Environmental Chemical Engineering, 2020, 8, 104542.	3.3	18

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73	Statistical physics interpretation of the adsorption mechanism of Pb2+, Cd2+ and Ni2+ on chicken feathers. Journal of Molecular Liquids, 2020, 319, 114168.	2.3	57
74	Adsorption of methylene blue on silica nanoparticles: Modelling analysis of the adsorption mechanism via a double layer model. Journal of Molecular Liquids, 2020, 319, 114348.	2.3	28
75	Preparation of a Hybrid Membrane from Whey Protein Fibrils and Activated Carbon to Remove Mercury and Chromium from Water. Membranes, 2020, 10, 386.	1.4	18
76	Understanding the adsorption mechanism of Ag+ and Hg2+ on functionalized layered double hydroxide via statistical physics modeling. Applied Clay Science, 2020, 198, 105828.	2.6	47
77	Exfoliated Clay Decorated with Magnetic Iron Nanoparticles for Crystal Violet Adsorption: Modeling and Physicochemical Interpretation. Nanomaterials, 2020, 10, 1454.	1.9	21
78	Experimental and Theoretical Studies of Methyl Orange Uptake by Mn–Rich Synthetic Mica: Insights into Manganese Role in Adsorption and Selectivity. Nanomaterials, 2020, 10, 1464.	1.9	22
79	Adsorption of copper (II) cation on polysulfone/zeolite blend sheet membrane: Synthesis, characterization, experiments and adsorption modelling. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2020, 601, 124980.	2.3	30
80	Ternary adsorption of cobalt, nickel and methylene blue on a modified chitin: Phenomenological modeling and physical interpretation of the adsorption mechanism. International Journal of Biological Macromolecules, 2020, 158, 595-604.	3.6	44
81	Synergistic adsorption of Pb2+ and CrO42â^' on an engineered biochar highlighted by statistical physical modeling. Journal of Molecular Liquids, 2020, 312, 113483.	2.3	24
82	Analysis of Terpolymerization Systems for the Development of Carbon Fiber Precursors of PAN. International Journal of Polymer Science, 2020, 2020, 1-13.	1.2	7
83	Fabrication and characterization of a thin coated adsorbent for antibiotic and analgesic adsorption: Experimental investigation and statistical physical modelling. Chemical Engineering Journal, 2020, 401, 126007.	6.6	28
84	Origin of the outstanding performance of Zn Al and Mg Fe layered double hydroxides in the adsorption of 2-nitrophenol: A statistical physics assessment. Journal of Molecular Liquids, 2020, 314, 113572.	2.3	13
85	Synthesis and characterization of nanostructured calcium oxides supported onto biochar and their application as catalysts for biodiesel production. Renewable Energy, 2020, 160, 52-66.	4.3	53
86	Adsorption of hazardous dyes on functionalized multiwalled carbon nanotubes in single and binary systems: Experimental study and physicochemical interpretation of the adsorption mechanism. Chemical Engineering Journal, 2020, 389, 124467.	6.6	125
87	Recovery of grape waste for the preparation of adsorbents for water treatment: Mercury removal. Journal of Environmental Chemical Engineering, 2020, 8, 103738.	3.3	17
88	Novel hybrid multifunctional composite of chitosan and altered basalt for barium adsorption: Experimental and theoretical studies. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2020, 593, 124613.	2.3	23
89	Removal of caffeine, nicotine and amoxicillin from (waste)waters by various adsorbents. A review. Journal of Environmental Management, 2020, 261, 110236.	3.8	152
90	Adsorption of methylene blue on comminuted raw avocado seeds: Interpretation of the effect of salts via physical monolayer model. Journal of Molecular Liquids, 2020, 305, 112815.	2.3	53

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91	Adsorption of congo red and methylene blue dyes on an ashitaba waste and a walnut shell-based activated carbon from aqueous solutions: Experiments, characterization and physical interpretations. Chemical Engineering Journal, 2020, 388, 124263.	6.6	319
92	Insights of the adsorption mechanism of methylene blue on brazilian berries seeds: Experiments, phenomenological modelling and DFT calculations. Chemical Engineering Journal, 2020, 394, 125011.	6.6	60
93	Preparation of a new adsorbent for the removal of arsenic and its simulation with artificial neural network-based adsorption models. Journal of Environmental Chemical Engineering, 2020, 8, 103928.	3.3	42
94	Valorization of agri-food industry wastes to prepare adsorbents for heavy metal removal from water. Journal of Environmental Chemical Engineering, 2020, 8, 104067.	3.3	48
95	A novel multifunctional adsorbent of pomegranate peel extract and activated anthracite for Mn(VII) and Cr(VI) uptake from solutions: Experiments and theoretical treatment. Journal of Molecular Liquids, 2020, 311, 113169.	2.3	20
96	Kinetic, thermodynamic and mechanism study of the adsorption of phenol on Moroccan clay. Journal of Molecular Liquids, 2020, 312, 113383.	2.3	46
97	Adsorption of crystal violet on biomasses from pecan nutshell, para chestnut husk, araucaria bark and palm cactus: Experimental study and theoretical modeling via monolayer and double layer statistical physics models. Chemical Engineering Journal, 2019, 378, 122101.	6.6	148
98	Adsorption of dyes acid red 1 and acid green 25 on grafted clay: Modeling and statistical physics interpretation. Journal of Molecular Liquids, 2019, 294, 111610.	2.3	47
99	Adsorption of indium (III) from aqueous solution on raw, ultrasound- and supercritical-modified chitin: Experimental and theoretical analysis. Chemical Engineering Journal, 2019, 373, 1247-1253.	6.6	43
100	Statistical physics-based analysis of the adsorption of Cu2+ and Zn2+ onto synthetic cancrinite in single-compound and binary systems. Journal of Environmental Chemical Engineering, 2019, 7, 103217.	3.3	45
101	Interpretation of the adsorption mechanism of Reactive Black 5 and Ponceau 4R dyes on chitosan/polyamide nanofibers via advanced statistical physics model. Journal of Molecular Liquids, 2019, 285, 165-170.	2.3	121
102	Adsorption of ibuprofen on organo-sepiolite and on zeolite/sepiolite heterostructure: Synthesis, characterization and statistical physics modeling. Chemical Engineering Journal, 2019, 371, 868-875.	6.6	92
103	Statistical physics modeling and interpretation of methyl orange adsorption on high–order mesoporous composite of MCM–48 silica with treated rice husk. Journal of Molecular Liquids, 2019, 285, 678-687.	2.3	46
104	Monolayer and multilayer adsorption of pharmaceuticals on activated carbon: Application of advanced statistical physics models. Journal of Molecular Liquids, 2019, 283, 276-286.	2.3	57
105	Surfactant–modified serpentine for fluoride and Cr(VI) adsorption in single and binary systems: Experimental studies and theoretical modeling. Chemical Engineering Journal, 2019, 369, 333-343.	6.6	64
106	Understanding the adsorption mechanism of phenol and 2-nitrophenol on a biopolymer-based biochar in single and binary systems via advanced modeling analysis. Chemical Engineering Journal, 2019, 371, 1-6.	6.6	107
107	Understanding the adsorption of Pb2+, Hg2+ and Zn2+ from aqueous solution on a lignocellulosic biomass char using advanced statistical physics models and density functional theory simulations. Chemical Engineering Journal, 2019, 365, 305-316.	6.6	94

108 Adsorption in Water Treatment. , 2019, , .

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109	An artificial neural network-based NRTL model for simulating liquid-liquid equilibria of systems present in biofuels production. Fluid Phase Equilibria, 2019, 483, 153-164.	1.4	25
110	Adsorption of phenol on microwave-assisted activated carbons: Modelling and interpretation. Journal of Molecular Liquids, 2019, 274, 309-314.	2.3	46
111	Iron-modified composite adsorbent coating for azo dye removal and its regeneration by photo-Fenton process: Synthesis, characterization and adsorption mechanism interpretation. Chemical Engineering Journal, 2019, 361, 31-40.	6.6	56
112	A new statistical physics model for the ternary adsorption of Cu2+, Cd2+ and Zn2+ ions on bone char: Experimental investigation and simulations. Chemical Engineering Journal, 2018, 343, 544-553.	6.6	47
113	Water defluoridation with avocado-based adsorbents: Synthesis, physicochemical characterization and thermodynamic studies. Journal of Molecular Liquids, 2018, 254, 188-197.	2.3	31
114	Equilibrium study of single and binary adsorption of lead and mercury on bentonite-alginate composite: Experiments and application of two theoretical approaches. Journal of Molecular Liquids, 2018, 253, 160-168.	2.3	46
115	Dynamic fuzzy neural network for simulating the fixed-bed adsorption of cadmium, nickel, and zinc on bone char. International Journal of Environmental Science and Technology, 2018, 15, 915-926.	1.8	7
116	Insights and pitfalls of artificial neural network modeling of competitive multi-metallic adsorption data. Journal of Molecular Liquids, 2018, 251, 15-27.	2.3	33
117	Kinetics, Thermodynamics, and Competitive Adsorption of Heavy Metals from Water Using Orange Biomass. Water Environment Research, 2018, 90, 2114-2125.	1.3	12
118	Insights on the statistical physics modeling of the adsorption of Cd2+ and Pb2+ ions on bentonite-chitosan composite in single and binary systems. Chemical Engineering Journal, 2018, 354, 569-576.	6.6	93
119	Artificial neural network-based surrogate modeling of multi-component dynamic adsorption of heavy metals with a biochar. Journal of Environmental Chemical Engineering, 2018, 6, 5389-5400.	3.3	30
120	Synthesis and characterization of a novel amphoteric adsorbent coating for anionic and cationic dyes adsorption: Experimental investigation and statistical physics modelling. Chemical Engineering Journal, 2018, 351, 221-229.	6.6	58
121	Preparation of activated carbons from pecan nutshell and their application in the antagonistic adsorption of heavy metal ions. Journal of Molecular Liquids, 2017, 230, 686-695.	2.3	102
122	Fluoride adsorption properties of cerium-containing bone char. Journal of Fluorine Chemistry, 2017, 197, 63-73.	0.9	54
123	Importance of iron oxides on the carbons surface vs the specific surface for VOC's adsorption. Ecological Engineering, 2017, 106, 400-408.	1.6	19
124	Optimization of Intensified Separation Processes using Differential Evolution with Tabu List. Advances in Process Systems Engineering, 2017, , 260-288.	0.3	3
125	Antagonistic binary adsorption of heavy metals using stratified bone char columns. Journal of Molecular Liquids, 2017, 241, 334-346.	2.3	38
126	Fluoride adsorption from aqueous solution using a protonated clinoptilolite and its modeling with artificial neural network-based equations. Journal of Fluorine Chemistry, 2017, 204, 98-106.	0.9	28

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127	Performance analysis of stopping criteria of population-based metaheuristics for global optimization in phase equilibrium calculations and modeling. Fluid Phase Equilibria, 2016, 427, 104-125.	1.4	14
128	Effect of surface chemistry of carbons from pine sawdust for the adsorption of acid, basic and reactive dyes and their bioregeneration using Pseudomona putida. Ecological Engineering, 2016, 95, 112-118.	1.6	9
129	Stochastic Optimization for Process Intensification. , 2016, , 261-277.		0
130	Relevance of anionic dye properties on water decolorization performance using bone char: Adsorption kinetics, isotherms and breakthrough curves. Journal of Molecular Liquids, 2016, 219, 425-434.	2.3	54
131	Tailoring the adsorption behavior of bone char for heavy metal removal from aqueous solution. Adsorption Science and Technology, 2016, 34, 368-387.	1.5	42
132	A survey of multi-component sorption models for the competitive removal of heavy metal ions using bush mango and flamboyant biomasses. Journal of Molecular Liquids, 2016, 224, 1041-1054.	2.3	37
133	Synthesis of denim waste-based adsorbents and their application in water defluoridation. Journal of Molecular Liquids, 2016, 221, 469-478.	2.3	18
134	Sorption of heavy metal ions from aqueous solution using acid-treated avocado kernel seeds and its FTIR spectroscopy characterization. Journal of Molecular Liquids, 2016, 215, 555-564.	2.3	37
135	Adsorption of zinc ions on bone char using helical coil-packed bed columns and its mass transfer modeling. Desalination and Water Treatment, 2016, 57, 24200-24209.	1.0	5
136	Critical point calculations of multi-component reservoir fluids using nature-inspired metaheuristic algorithms. Fluid Phase Equilibria, 2016, 409, 280-290.	1.4	9
137	Gravitational Search, Monkey, and Krill Herd Swarm Algorithms for Phase Stability, Phase Equilibrium, and Chemical Equilibrium Problems. Chemical Engineering Communications, 2016, 203, 389-406.	1.5	6
138	Design analysis of fixed-bed synergic adsorption of heavy metals and acid blue 25 on activated carbon. Desalination and Water Treatment, 2016, 57, 9824-9836.	1.0	15
139	Parameter Identification in Liquid-Liquid Equilibrium Modeling of Food-Related Thermodynamic Systems Using Flower Pollination Algorithms. Open Chemical Engineering Journal, 2016, 10, 59-73.	0.4	12
140	Editorial: Current Topics in Phase Equilibria of Systems for Food Application. Open Chemical Engineering Journal, 2016, 10, 1-3.	0.4	0
141	SYNTHESIS AND CHARACTERIZATION OF AMINATED COPOLYMERS OF POLYACRYLONITRILE-GRAFT-CHITOSAN AND THEIR APPLICATION FOR THE REMOVAL OF HEAVY METALS FROM AQUEOUS SOLUTION. Journal of the Chilean Chemical Society, 2015, 60, 2876-2880.	0.5	8
142	MAKHA—A New Hybrid Swarm Intelligence Global Optimization Algorithm. Algorithms, 2015, 8, 336-365.	1.2	10
143	On the Performance of Swarm Intelligence Optimization Algorithms for Phase Stability and Liquid-Liquid and Vapor-Liquid Equilibrium Calculations. Periodica Polytechnica: Chemical Engineering, 2015, 59, 186-200.	0.5	3
144	Assessment of naproxen adsorption on bone char in aqueous solutions using batch and fixed-bed processes. Journal of Molecular Liquids, 2015, 209, 187-195.	2.3	88

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145	Analysis and modeling of multicomponent sorption of heavy metals on chicken feathers using Taguchi's experimental designs and artificial neural networks. Desalination and Water Treatment, 2015, 55, 1885-1899.	1.0	21
146	Modeling of liquid–liquid equilibrium of systems relevant for biodiesel production using Backtracking Search Optimization. Fluid Phase Equilibria, 2015, 388, 84-92.	1.4	18
147	Physico-chemical characterization of metal-doped bone chars and their adsorption behavior for water defluoridation. Applied Surface Science, 2015, 355, 748-760.	3.1	62
148	Breakthrough curve modeling of liquid-phase adsorption of fluoride ions on aluminum-doped bone char using micro-columns: Effectiveness of data fitting approaches. Journal of Molecular Liquids, 2015, 208, 114-121.	2.3	50
149	Reactive distillation: A review of optimal design using deterministic and stochastic techniques. Chemical Engineering and Processing: Process Intensification, 2015, 97, 134-143.	1.8	109
150	Process Alternatives for Biobutanol Purification: Design and Optimization. Industrial & Engineering Chemistry Research, 2015, 54, 351-358.	1.8	45
151	Neural Network Modeling of Heavy Metal Sorption on Lignocellulosic Biomasses: Effect of Metallic Ion Properties and Sorbent Characteristics. Industrial & Engineering Chemistry Research, 2015, 54, 443-453.	1.8	24
152	Nonlinear parameter estimation of e-NRTL model for quaternary ammonium ionic liquids using Cuckoo Search. Chemical Engineering Research and Design, 2015, 93, 464-472.	2.7	14
153	Chemical modification of Byrsonima crassifolia with citric acid for the competitive sorption of heavy metals from water. International Journal of Environmental Science and Technology, 2015, 12, 2867-2880.	1.8	25
154	Analysis of synergistic and antagonistic adsorption of heavy metals and acid blue 25 on activated carbon from ternary systems. Chemical Engineering Research and Design, 2015, 93, 755-772.	2.7	58
155	Removal of heavy metals and arsenic from aqueous solution using textile wastes from denim industry. International Journal of Environmental Science and Technology, 2015, 12, 1657-1668.	1.8	24
156	A new synthesis route for bone chars using CO2 atmosphere and their application as fluoride adsorbents. Microporous and Mesoporous Materials, 2015, 209, 38-44.	2.2	66
157	Gradient-Based Cuckoo Search for Global Optimization. Mathematical Problems in Engineering, 2014, 2014, 1-12.	0.6	16
158	On the Effectiveness of Nature-Inspired Metaheuristic Algorithms for Performing Phase Equilibrium Thermodynamic Calculations. Scientific World Journal, The, 2014, 2014, 1-12.	0.8	10
159	Optimization of Alternative Distillation Sequences for Natural Gas Sweetening. Computer Aided Chemical Engineering, 2014, , 1201-1206.	0.3	3
160	Intelligent Firefly Algorithm for Global Optimization. Studies in Computational Intelligence, 2014, , 315-330.	0.7	17
161	A note on effective phase stability calculations using a Gradient-Based Cuckoo Search algorithm. Fluid Phase Equilibria, 2014, 375, 360-366.	1.4	14
162	Preparation, characterization and analyses of carbons with natural and induced calcium compounds for the adsorption of fluoride. Journal of Analytical and Applied Pyrolysis, 2014, 105, 75-82.	2.6	20

#	Article	IF	CITATIONS
163	Effect of Using Adjusted Parameters, Local and Global Optimums, for Phase Equilibrium Prediction on the Synthesis of Azeotropic Distillation Columns. Industrial & Engineering Chemistry Research, 2014, 53, 1489-1502.	1.8	5
164	Adsorption of dyes with different molecular properties on activated carbons prepared from lignocellulosic wastes by Taguchi method. Microporous and Mesoporous Materials, 2014, 199, 99-107.	2.2	60
165	Multiobjective Optimization of a Hydrodesulfurization Process of Diesel Using Distillation with Side Reactor. Industrial & Engineering Chemistry Research, 2014, 53, 16425-16435.	1.8	12
166	Phase Stability Analysis and Phase Equilibrium Calculations in Reactive and Nonreactive Systems Using Charged System Search Algorithms. Industrial & Engineering Chemistry Research, 2014, 53, 2382-2395.	1.8	10
167	Polyester fiber production using virgin and recycled PET. Fibers and Polymers, 2014, 15, 547-552.	1.1	26
168	Unconstrained Gibbs Free Energy Minimization for Phase Equilibrium Calculations in Nonreactive Systems, Using an Improved Cuckoo Search Algorithm. Industrial & Engineering Chemistry Research, 2014, 53, 10826-10834.	1.8	21
169	A note on an extended short-cut method for the design of multicomponent reactive distillation columns. Chemical Engineering Research and Design, 2014, 92, 1-12.	2.7	10
170	Synthesis and adsorption properties of activated carbons from biomass of Prunus domestica and Jacaranda mimosifolia for the removal of heavy metals and dyes from water. Industrial Crops and Products, 2013, 42, 315-323.	2.5	132
171	Design, optimization and controllability of an alternative process based on extractive distillation for an ethane–carbon dioxide mixture. Chemical Engineering and Processing: Process Intensification, 2013, 74, 55-68.	1.8	32
172	Sorption mechanism of anionic dyes on pecan nut shells (Carya illinoinensis) using batch and continuous systems. Industrial Crops and Products, 2013, 48, 89-97.	2.5	54
173	Cuckoo Search: A new nature-inspired optimization method for phase equilibrium calculations. Fluid Phase Equilibria, 2013, 337, 191-200.	1.4	105
174	Competitive adsorption of dyes and heavy metals on zeolitic structures. Journal of Environmental Management, 2013, 116, 213-221.	3.8	202
175	Modeling of fixed-bed adsorption of fluoride on bone char using a hybrid neural network approach. Chemical Engineering Journal, 2013, 228, 1098-1109.	6.6	107
176	Assessment of capabilities and limitations of stochastic global optimization methods for modeling mean activity coefficients of ionic liquids. Fluid Phase Equilibria, 2013, 340, 15-26.	1.4	15
177	Optimization of pyrolysis conditions and adsorption properties of bone char for fluoride removal from water. Journal of Analytical and Applied Pyrolysis, 2013, 104, 10-18.	2.6	127
178	An improved ant colony optimization method and its application for the thermodynamic modeling of phase equilibrium. Fluid Phase Equilibria, 2013, 353, 121-131.	1.4	28
179	On the multiple solutions of the reactive distillation column for production of fuel ethers. Chemical Engineering and Processing: Process Intensification, 2013, 72, 31-41.	1.8	10
180	Role of acid blue 25 dye as active site for the adsorption of Cd2+ and Zn2+ using activated carbons. Dyes and Pigments, 2013, 96, 459-466.	2.0	21

#	Article	IF	CITATIONS
181	Competitive Sorption of Pb, Cd, and Ni on Chicken Feathers from Binary Aqueous Solutions. International Journal of Chemical Reactor Engineering, 2012, 10, .	0.6	5
182	Purification of bioethanol using extractive batch distillation: Simulation and experimental studies. Chemical Engineering and Processing: Process Intensification, 2012, 61, 30-35.	1.8	38
183	Analysis and prediction of input multiplicity for the reactive flash separation using reaction-invariant composition variables. Chemical Engineering Research and Design, 2012, 90, 1856-1870.	2.7	2
184	Evaluation of Covariance Matrix Adaptation Evolution Strategy, Shuffled Complex Evolution and Firefly Algorithms for phase stability, phase equilibrium and chemical equilibrium problems. Chemical Engineering Research and Design, 2012, 90, 2051-2071.	2.7	54
185	On the capabilities and limitations of harmony search for parameter estimation in vapor–liquid equilibrium modeling. Fluid Phase Equilibria, 2012, 332, 7-20.	1.4	12
186	Global Gibbs Free Energy Minimization in Reactive Systems via Harmony Search. International Journal of Chemical Reactor Engineering, 2012, 10, .	0.6	2
187	Multiobjective Optimization in Distillation with Reactor-Side for Hydrodesulfurization Process of Diesel. Computer Aided Chemical Engineering, 2012, , 682-686.	0.3	3
188	Optimizing the removal of fluoride from water using new carbons obtained by modification of nut shell with a calcium solution from egg shell. Biochemical Engineering Journal, 2012, 62, 1-7.	1.8	87
189	Synergic adsorption in the simultaneous removal of acid blue 25 and heavy metals from water using a Ca(PO3)2-modified carbon. Journal of Hazardous Materials, 2012, 199-200, 290-300.	6.5	105
190	Integrated Differential Evolution for Global Optimization and Its Performance for Modeling Vapor–Liquid Equilibrium Data. Industrial & Engineering Chemistry Research, 2011, 50, 10047-10061.	1.8	19
191	A Short Method To Calculate Residue Curve Maps in Multireactive and Multicomponent Systems. Industrial & Engineering Chemistry Research, 2011, 50, 2157-2166.	1.8	6
192	Improving the Adsorption of Heavy Metals from Water Using Commercial Carbons Modified with Egg Shell Wastes. Industrial & Engineering Chemistry Research, 2011, 50, 9354-9362.	1.8	63
193	Short-Cut Method for the Design of Reactive Distillation Columns. Industrial & Engineering Chemistry Research, 2011, 50, 10730-10743.	1.8	21
194	Evaluation of integrated differential evolution and unified bare-bones particle swarm optimization for phase equilibrium and stability problems. Fluid Phase Equilibria, 2011, 310, 129-141.	1.4	26
195	Novel bare-bones particle swarm optimization and its performance for modeling vapor–liquid equilibrium data. Fluid Phase Equilibria, 2011, 301, 33-45.	1.4	54
196	Constrained and unconstrained Gibbs free energy minimization in reactive systems using genetic algorithm and differential evolution with tabu list. Fluid Phase Equilibria, 2011, 300, 120-134.	1.4	34
197	Batch and column studies of Zn2+ removal from aqueous solution using chicken feathers as sorbents. Chemical Engineering Journal, 2011, 167, 67-76.	6.6	108
198	Role of the pericarp of Carya illinoinensis as biosorbent and as precursor of activated carbon for the removal of lead and acid blue 25 in aqueous solutions. Journal of Analytical and Applied Pyrolysis, 2011, 92, 143-151.	2.6	51

#	Article	IF	CITATIONS
199	Kinetic and Thermodynamic Modeling of Cd+2 and Ni+2 Biosorption by Raw Chicken Feathers. International Journal of Chemical Reactor Engineering, 2011, 9, .	0.6	9
200	Free Radicals Copolymerization Optimization, System. Computer Aided Chemical Engineering, 2011, 29, 849-854.	0.3	1
201	Influencia de la radiación lÃjser de CO ₂ en las propiedades mecÃjnicas de pastas de cemento portland. Materiales De Construccion, 2011, 61, 77-91.	0.2	5
202	A comparative study of particle swarm optimization and its variants for phase stability and equilibrium calculations in multicomponent reactive and non-reactive systems. Fluid Phase Equilibria, 2010, 289, 110-121.	1.4	47
203	Evaluation of stochastic global optimization methods for modeling vapor–liquid equilibrium data. Fluid Phase Equilibria, 2010, 287, 111-125.	1.4	40
204	Extractive Dividing Wall Column: Design and Optimization. Industrial & Engineering Chemistry Research, 2010, 49, 3672-3688.	1.8	142
205	PHASE STABILITY AND EQUILIBRIUM CALCULATIONS IN REACTIVE SYSTEMS USING DIFFERENTIAL EVOLUTION AND TABU SEARCH. Advances in Process Systems Engineering, 2010, , 413-463.	0.3	2
206	Design and Optimization of Thermally Coupled Distillation Sequences for Purification of Bioethanol. Computer Aided Chemical Engineering, 2009, , 957-962.	0.3	5
207	Surface structure changes in cement paste exposed to 10.6î¼m laser radiation. , 2009, , .		0
208	Particle Swarm Optimization for Phase Stability and Equilibrium Calculations in Reactive Systems. Computer Aided Chemical Engineering, 2009, , 635-640.	0.3	6
209	Calculation of homogeneous azeotropes in reactive and non-reactive mixtures using a stochastic optimization approach. Fluid Phase Equilibria, 2009, 281, 22-31.	1.4	23
210	Design and Optimization of Thermally Coupled Extractive Distillation Sequences. Computer Aided Chemical Engineering, 2009, 26, 189-194.	0.3	9
211	Energyâ€efficient complex distillation sequences: Control properties. Canadian Journal of Chemical Engineering, 2008, 86, 249-259.	0.9	7
212	An effective calculation procedure for two-phase equilibria in multireaction systems. Fluid Phase Equilibria, 2008, 269, 48-55.	1.4	6
213	Correlation of Activity Coefficients in Aqueous Solutions of Ammonium Salts Using Local Composition Models and Stochastic Optimization Methods. Chemical Product and Process Modeling, 2008, 3, .	0.5	2
214	Study of arrangements for distillation of quaternary mixtures using less than N-1 columns. Computer Aided Chemical Engineering, 2008, , 295-300.	0.3	0
215	Attainment of the absorption spectra of polyacrylonitrile based on the AM1 semiempirical Hartree-Fock model. , 2007, , .		0
216	Thermodynamic calculations for chemical engineering using a simulated annealing optimization method. Computer Aided Chemical Engineering, 2007, , 243-248.	0.3	3

#	Article	IF	CITATIONS
217	The performance of simulated annealing in parameter estimation for vapor-liquid equilibrium modeling. Brazilian Journal of Chemical Engineering, 2007, 24, 151-162.	0.7	17
218	Performance of Stochastic Global Optimization Methods in the Calculation of Phase Stability Analyses for Nonreactive and Reactive Mixtures. Industrial & Engineering Chemistry Research, 2006, 45, 4764-4772.	1.8	48
219	Characterization of cement and concrete exposed to laser radiation at 10.6 \hat{l} 4m. , 2006, , .		0
220	Theoretical analysis of auto stability in laser resonators with thermal lenses effect. , 2006, 6046, 615.		0
221	An algebraic formulation for an equal area rule to determine phase compositions in simple reactive systems. Fluid Phase Equilibria, 2006, 241, 25-30.	1.4	7
222	Dynamic analysis of thermally coupled distillation sequences with undirectional flows for the separation of ternary mixtures. Korean Journal of Chemical Engineering, 2006, 23, 689-698.	1.2	26
223	An algebraic method that includes Gibbs minimization for performing phase equilibrium calculations for any number of components or phases. Fluid Phase Equilibria, 2003, 210, 229-245.	1.4	191
224	On the importance of surface chemistry and composition of Bone char for the sorption of heavy metals from aqueous solution. Desalination and Water Treatment, 0, , 1-12.	1.0	11